# IN THE UNITED STATES PATENT AND TRADEMARK LOFFICE

In re patent application of: MORITA et al

Serial No.: 09/068,592

Filed: May 14, 1998

For: CATHODE MATERIAL FOR LITHIUM

SECONDARY BATTERY, PROCESS FOR MANUFACTURING THE SAME, AND

ECONDARY BATTERY USING THE SAME

Patent

Examiner: Weiner, L.

Art Unit: 1745

Docket No.:P05934US0/LRP

#### **STATEMENT OF RELEVANCE**

Washington, D.C.

SIR:

Enclosed herewith are four opposition documents which were mailed on July 11, 2000, together with the appropriate fee.

The relevance of these documents is as follows:

Opposition Document Re Counterpart Japanese Patent No. 2976300

This document argues that Japanese Patent No. 2976300 is not novel over Japanese Unexamined Patent Publication 242912/1988 (hereinafter "JP-A-242912"). JP-A-242912 is cited in the International Search Report. JP-A-242912 discloses a carbon powder comprising aggregate coke covered with quinoline soluble matter. The carbon powder is prepared by dispersing aggregate coke in tar or pitch, followed by extraction the aggregate coke with solvent such as benzene, toluene, pyridine, tar middle oil, tar light oil or a mixture thereof.

### Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 1

This document argues that claims 1-5 are not novel over Japanese Unexamined Patent Publication 94838/1993 (hereinafter "JP-A-94838") which is cited in the International Search Report. According to this document, JP-A-94838 discloses two-layer carbonaceous material prepared by thermal decomposition of organic compound such as aliphatic saturated hydrocarbons, aliphatic unsaturated hydrocarbons and aromatic hydrocarbons in the presence of carbonaceous core material to cover core carbonaceous material with surface carbonaceous material. JP-A-94838 discloses particles of natural graphite and artificial graphite as core carbonaceous material. This document further points out that multi-layer carbonaceous material of JP-A-94838 prepared by gas phase process as shown above has no grinding face. With respect to multi-layer carbonaceous material, JP-A-94838 discloses:

- (i) BET specific surface area is  $0.5-100 \text{ m}^2/\text{g}$ ;
- (ii) d002 is 3.35-3.43 Å;
- (iii) Lc is 20-1000 Å; and
- (iv) True specific gravity is 2.10-2.25 g/cm<sup>3</sup>.

## Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 2

This document states that the application cannot enjoy priority of Japanese patent application 295462/1995, since JP-295462/1995 does not disclose descriptions concerning:

- (i) edge parts of a core carbon material are partially coated with a coat-forming carbon material;
  - (ii) two-layer carbon material is nearly spherical or ellipsoidal; and
  - (iii) two-layer carbon material has no grinding face.

This document also states that "no grinding face" is not supported by the specification of PCT/JP96/03344.

This document states that the patent is not novel over Japanese Unexamined Patent Publication 222218/1996 (hereinafter "JP-A-222218"). According to this document, JP-A-222218 discloses a multi-phase structured carbon material without exposed core or grinding face, wherein the carbon material have the following properties:

- (i) d002 is not more than 0.340 nm;
- (ii) Lc is 50 nm or more; and
- (iii) volume-based average particle diameter is not more than 30 μm.

Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 3

This document argues that the patent is not novel over Japanese Unexamined Patent Publication 370662/1992 (hereinafter "JP-A-370662"). JP-A-370662 is a

counterpart European patent application EP 0 549 802 A1 which is cited in the FIVED NOV 1 2000 CROUP 1700

LARSON & TAYLOR, PLC

Registration No. 36255

1199 North Fairfax Street, Suite 900 Alexandria, VA 22314 (703) 739-4900

October 26, 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: MORITA, et al

Serial No.: 09/068,592 Filed: May 14, 1998

For: CATHODE MATERIAL FOR LITHIUM SECONDARY BATTERY, PROCESS FOR MANUFACTURING THE

SAME, AND SECONDARY BATTERY USING THE

SAME

ASSISTANT COMMISSIONER FOR PATENT

WASHINGTON, D.C. 20231

Date: October 26, 2000

SIR:

Examiner: Weiner, L.

Art Unit: 1745

Docket No.: P05934LIS0/LRP

GROUP 1700

#### Attached is:

a response after Final Rejection dated

X a response to the Office Action dated April 26, 2000.

a Preliminary Amendment

**X** a Petition for an extension of time

X Other: IDS; List of References; Statement of Relevance; 6 references

Fees: For claims if required and/or other fees as shown below:

	NOW	Previously Paid For	Present Extra	Rate	_\$_
TOTAL CLAIMS	18	37		X \$ 18 =	
INDEP. CLAIMS	2	5		X \$ 80 =	
TOTAL OF ABOVE CLAIMS FEES=					
Reduction by ½ for small entity status of applicant					
SUBTOTAL =					
X Fee for extension of time (per attached Petition)					890.00
X Other fee for IDS					240.00
TOTAL OF ALL FEES =					1,130.00

- X A check in the amount of \$1,130 is enclosed. If no check or an insufficient check is enclosed and a fee is due in connection herewith, the Commissioner is authorized to charge any fee or additional fee due in connection herewith to Deposit Account No. 12-0555. A duplicate of this sheet is enclosed.
- X In the event that a petition for extension of time is required to be submitted herewith and that a separate petition is not submitted herewith, applicant hereby petitions under 37 CFR 1.136(a) for an extension of time of as many months as are required to render this submission timely. Any fee is authorized above.

Respectfully submitted,

By: Linda R. Poteate

Registration No.: 36255

LARSON & TAYLOR, PLC • 1199 North Fairfax St. • Suite 900 • Alexandria, VA 22314